

AMENDMENTS

In the Claims

Please amend claims 1, 15, 20, 38, and 53 as shown herein.

Claims 8 and 41 are cancelled herein without prejudice.

Subject matter indicated as allowable in claim 8 is incorporated into amended independent claims 1, 15, 20, 38, and 53.

Claims 1-4, 7, 15-23, 26-27, 38, 40, 42-44, and 53 are pending and are listed following:

1. **(currently amended)** A network system, comprising:
a network server configured to maintain network access information corresponding to users authorized to access the network system, the network access information comprising identifiers to indicate network group memberships that an individual user is a member of in the network system;

a domain controller remotely located from the network server at a remote network site and communicatively linked with the network server, the domain controller configured to locally administrate access to the network system;

the domain controller further configured to:

track individual users that request access to the network system via the domain controller at the remote network site, the domain controller configured to track a user by identifying the remote network site where the user requests the access, recording a time at which the request is made, and monitoring when the network access information is cached for the user that requests the access;

1 receive a first network access request from the user and validate the first
2 network access request with the network access information maintained at the
3 network server when the network access information is not cached at the domain
4 controller;

5 maintain user objects associated with the individual users that request
6 access to the network system from the domain controller;

7 cache the network access information including the user objects; and

8 receive a second network access request from the user and validate the
9 second network access request with the network access information cached at the
10 domain controller[.];

11 wherein the network server is further configured to replicate a partial copy
12 of the user objects from the domain controller such that the replicated partial copy
13 of the user objects can be associated with individual identifiers to identify the
14 network group memberships for the individual user.

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16 **2. (previously presented)** A network system as recited in claim 1,
17 wherein the domain controller is further configured to cache the network access
18 information only for the individual users that request access to the network system
19 via the domain controller at the remote network site.

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21 **3. (previously presented)** A network system as recited in claim 1,
22 wherein the domain controller is further configured to update the network access
23 information at the domain controller for the individual users that request access to
24 the network system via the domain controller at the remote network site.
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2 **4. (previously presented)** A network system as recited in claim 1,
3 wherein the domain controller is further configured to update the network access
4 information at the domain controller for the individual users that request access to
5 the network system via the domain controller at the remote network site within a
6 defined time interval.

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8 **5-6. (canceled)**

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10 **7. (previously presented)** A network system as recited in claim 1,
11 wherein the domain controller is further configured to validate the second network
12 access request with the network access information cached at the domain
13 controller if the second network access request is within a defined time interval.

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15 **8-14. (canceled)**
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1 **15. (currently amended)** A network, comprising:

2 a global information server configured to maintain network information
3 corresponding to users of the network;

4 a remote server communicatively linked with the global information server,
5 the remote server configured to:

6 receive a first network access request from a user and validate the first
7 network access request with the network information maintained at the global
8 information server when the network information corresponding to the user is not
9 cached at the remote server;

10 cache the network information corresponding to the user at the remote
11 server;

12 receive a second network access request from the user and validate the
13 second network access request with the network information cached at the remote
14 server;

15 track individual users that request access to the network from the remote
16 server by identifying the remote server where the user requests the access,
17 recording a time at which the request is made, and monitoring when the network
18 information is cached for the user that requests the access; and

19 update the network information including replicating user objects cached at
20 the remote server on the global information server for the individual users that
21 access the network from the remote server.

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2 **16. (previously presented)** A network as recited in claim 15,
3 wherein the remote server is further configured to update the network information
4 cached at the remote server for the individual users that access the network from
5 the remote server within a defined time interval.

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7 **17. (previously presented)** A network as recited in claim 15,
8 wherein the remote server is further configured to validate the second network
9 access request with the network information cached at the remote server if the user
10 accessed the network from the remote server within a defined time interval.

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12 **18. (original)** A network as recited in claim 15, wherein the remote
13 server is further configured to track individual users that request access to the
14 network information cached at the remote server.

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16 **19. (original)** A network as recited in claim 15, wherein the remote
17 server is further configured to receive a user request to access the network
18 information cached at the remote server and validate the user request if the user
19 accessed the network from the remote server within a defined time interval.

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21 **20. (currently amended)** A method, comprising:
22 maintaining network access information at a first network site, the network
23 access information identifying users authorized to access a network and including
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1 identifiers to indicate network group memberships that an individual user is a
2 member of in the network system;

3 validating a first network access request from a user at a second network
4 site with the network access information maintained at the first network site when
5 the network access information identifying the user is not cached at the second
6 network site;

7 caching the network access information identifying the user at the second
8 network site;

9 validating a second network access request from the user at the second
10 network site with the network access information cached at the second network
11 site; and

12 tracking individual user requests to access the network from the second
13 network site by identifying the second network site where the user requests the
14 access, recording a time at which the user requests the access, and monitoring
15 when the network access information identifying the user is cached for the user
16 making the request[[]] ;and,

17 replicating a partial copy of user objects cached at the second network site
18 such that the replicated partial copy of the user objects can be associated with
19 individual identifiers to identify the network group memberships for individual
20 users.

1 **21. (previously presented)** A method as recited in claim 20, wherein
2 said caching comprises storing the network access information at the second
3 network site only for the individual users that request access to the network from
4 the second network site.

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6 **22. (previously presented)** A method as recited in claim 20, further
7 comprising updating the network access information at the second network site for
8 the individual users that periodically request access to the network from the
9 second network site.

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11 **23. (previously presented)** A method as recited in claim 20, further
12 comprising updating the network access information at the second network site for
13 the individual users that request access to the network from the second network
14 site within a defined time interval.

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16 **24-25. (canceled)**

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18 **26. (previously presented)** A method as recited in claim 20, wherein
19 said validating the second network access request comprises validating the second
20 network access request with the network access information cached at the second
21 network site if the second network access request is within a defined time interval.
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1 **27. (previously presented)** Computer readable media comprising
2 computer executable instructions that, when executed, direct a computing system
3 to perform the method of claim 20.

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5 **28-37. (canceled)**

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7 **38. (currently amended)** A method, comprising:
8 maintaining network information at a global information server, the
9 network information corresponding to users of the network and including
10 identifiers to indicate network group memberships that an individual user is a
11 member of in the network system;

12 receiving a first network access request from a user at a remote server
13 communicatively linked with the global information server;

14 validating the first network access request at the remote server with the
15 network information maintained at the global information server when the network
16 information corresponding to the user is not cached at the remote server;

17 maintaining, at the remote server, user objects associated with the
18 individual users that request access to the network system from the remote server;

19 caching the network information corresponding to the user at the remote
20 server;

21 receiving a second network access request from the user at the remote
22 server;

23 validating the second network access request at the remote server with the
24 network information cached at the remote server;

1 tracking, at the global information server, users that request access to the
2 network via the remote server by identifying where the access requests originate
3 and recording a time at which the access requests are made; and

4 updating the network information cached at the remote server with the
5 network information maintained at the global information server for users
6 authorized to access the network from the remote server, and that accessed the
7 remote server within a defined time interval; and,

8 replicating a partial copy of the user objects from the remote server such
9 that the replicated partial copy of the user objects can be associated with
10 individual identifiers to identify the network group memberships for the individual
11 user.

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13 **39. (canceled)**

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15 **40. (previously presented)** A method as recited in claim 38, wherein
16 said validating the second network access request comprises validating the second
17 network access request with the network information cached at the remote server
18 if the second network access request is received within a defined time interval.

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20 **41. (cancelled)**

1 **42. (previously presented)** A method as recited in claim 38, further
2 comprising:

3 receiving a user request to access the network information cached at the
4 remote server; and

5 validating the user request at the remote server.

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7 **43. (previously presented)** A method as recited in claim 38, further
8 comprising:

9 receiving a user request to access the network information cached at the
10 remote server; and

11 validating the user request at the remote server if the user request is
12 received within a defined time interval.

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14 **44. (previously presented)** Computer readable media comprising
15 computer executable instructions that, when executed, direct a computing system
16 to perform the method of claim 38.

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18 **45-52. (canceled)**
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2 **53. (currently amended)** A network system, comprising:

3 a global information server located at a main site on a network and
4 configured to maintain network access information corresponding to users
5 authorized to access the network;

6 a domain controller located at a remote site on the network and
7 communicatively linked with the global information server, the domain controller
8 configured to periodically cache the network access information from the global
9 information server and to locally administrate network access requests made from
10 a work station locally connected to the domain controller at the remote site, and to
11 maintain a cache of user objects associated with the individual users that request
12 access to the network system from the domain controller; and

13 ~~the domain controller further configured to track individual users that~~
14 ~~request access to the network by identifying the remote site where the request is~~
15 ~~made and a time at which the request is made.~~

16 the global information server further configured to replicate a partial copy
17 of the user objects from the remote server such that the replicated partial copy of
18 the user objects such that individual user objects are associated with specific
19 network access information.